



A service of the National Library of Medicine  
and the National Institutes of Health

www.pubmed.gov

My NCBI

[\[Sign In\]](#) [\[Regis\]](#)

All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Book

Search  for

Limits  Preview/Index  History  Clipboard  Details

Display   Show   Sort by  Send to

All: 1 Review: 0

Links

☐ 1: [Allergy](#). 1996 May;51(5):326-30.

### Characterization of soybean allergens causing sensitization of occupationally exposed bakers.

**Baur X, Pau M, Czuppon A, Fruhmenn G.**

Professional Associations' Research Institute for Occupational Medicine (BGFA), Ruhr University of Bochum, Germany.

Fourteen bakers suffering from workplace-related respiratory symptoms and sensitized to soybean were studied. Twelve of them were also allergic to wheat flour, 10 to rye flour, and five to alpha-amylase of *Aspergillus oryzae* (Asp o 2). IgE estimation by RAST strongly indicated that the trypsin inhibitor and lipoxidase are major allergens of soybean. Various allergenic components could be characterized by immunoblotting after two-dimensional electrophoresis. Our RAST and immunoblotting results show an interindividually different allergic response to inhalative soybean constituents, and that the trypsin inhibitor (20 kDa, pI approximately 4.5) is an important inhalative soybean allergen recognized by IgE antibodies in the sera of 86% of the examined sensitized bakers.

PMID: 8836337 [PubMed - indexed for MEDLINE]

### Related Links

Baker's asthma: still among the most frequent occupational respiratory disorders. [Allergy Clin Immunol. 1998]

Occupational asthma caused by soybean flour in bakers--differences with soybean-induced epidemic asthma. [Clin Exp Allergy. 2000]

Soybean allergy in patients allergic to birch pollen: clinical investigation and molecular characterization of allergens. [J Allergy Clin Immunol. 2004]

Rye flour allergens associated with baker's asthma. Correlation between in vivo and in vitro activities and comparison with their wheat and barley homologues. [Clin Exp Allergy. 1996]

Allergy to *Aspergillus*-derived enzymes in the baking industry: identification of beta-xylosidase from *Aspergillus niger* as a new allergen (Asp n 14). [J Allergy Clin Immunol. 1998]

See all Related Articles...

Display   Show   Sort by  Send to

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Dec 13 2006 10:56:50

BEST AVAILABLE COPY